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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,811	01/11/2007	Anthony Peter Hulbert	038819.57500US	9356

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EXAMINER	
NGUYEN, TUAN HOANG	
ART UNIT	**PAPER NUMBER**
2618	

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03/24/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/573,811	HULBERT, ANTHONY PETER	
	Examiner	Art Unit	
	TUAN H. NGUYEN	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 January 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *25-45* is/are pending in the application.

4a) Of the above claim(s) *1-24 and 46-48* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *25,26,28,29,31,34-40,43 and 45* is/are rejected.

7)☒ Claim(s) *27,30,32,33,41,42 and 44* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see applicant's remarks, filed on 01/14/2010, with respect to the rejection(s) of claims 1-16, 18-21 and 23-26 correspond, respectively, to the new set of claims 25-45 under 35 U.S.C § 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made over Haartsen (US PAT. 5,794,157) in view of Kegasa et al. (U.S. Patent No. 6,724,804 hereinafter, "Kegasa").

2. The Examiner determines to retain the restriction requirement, claims 46, 47 and 48 correspond, respectively, to Species 2, 3 and 4 as identified by the Examiner in the office action sent out on 06/04/2009. Applicant's election without traverse of Species I being, claims 1-16, 18-21 and 23-26 correspond, respectively, to claims 25-45 in the reply filed on 08/04/2009. Therefore, Claims 46-48 require to be cancelled.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 25, 36-39, 43 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen (US PAT. 5,794,157) in view of Kegasa et al. (U.S. Patent No. 6,724,804 hereinafter, "Kegasa").

Consider claim 25, Haartsen teaches a method of controlling interference from a transmitter in one communication system to a receiver in another communication system, the method comprising: transmitting a beacon, in a beacon transmission band, from a beacon transmitter associated with the receiver, the beacon being representative of a frequency within a beacon managed band at which the receiver is trying to receive (fig. 1, col. 6 lines 16-36); listening for the beacon at a beacon receiver associated with the transmitter (col. 6 lines 57-64); and deriving a power spectral density limit for a transmission from the transmitter based upon the strength of the beacon received at the beacon receiver (figs. 3 and 4, col. 2 lines 53-67).

Haartsen differs from the claimed invention in which the beacon transmission band being separated from the beacon managed band by using a different frequency.

However, Kegasa teaches the beacon transmission band being separated from the beacon managed band by using a different frequency (col. 18 lines 23-31).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Haartsen for the beacon transmission band being separated from the beacon managed band by using a different frequency, as per teaching of Kegasa, in order to provide a radio communications system which results in an improved utilization of frequencies and lightens the cost imposed on a subscriber by incorporating the frequency converter.

Consider claim 36, Haartsen further teaches each beacon transmits a type identifier and each beacon receiver comprises type specific correlation means, such that a beacon receiver can ignore same type beacons in determining whether or not or how much power to transmit (col. 6 lines 37-54).

Consider claim 37, Haartsen further teaches a receiver transmits a beacon only if interference levels exceed an acceptable value (col. 7 lines 16-25).

Consider claim 38, Haartsen further teaches the beacon power is adapted to the wanted signal power received at the receiver (col. 7 lines 59-67).

Consider claim 39, Haartsen further teaches the beacon power is adapted to the interference power received at the receiver (col. 5 line 61 through col. 6 line 15).

Consider claim 43, Haartsen further teaches the beacon receiver is periodically tested with an internal beacon of known power and its associated transmitter is prevented from transmitting if a beacon receiver fault occurs (col. 2 lines 53-67).

Consider claim 45, Haartsen teaches a transmitter for a communication system, the transmitter being provided with an associated beacon receiver (fig. 1, col. 6 lines 16-36), whereby a power spectral density limit for transmission from the transmitter is determined based on the strength of one or more beacons received at the associated beacon receiver (figs. 3 and 4, col. 2 lines 53-67).

5. Claims 26, 28, 29, 31 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen in view of Kegasa and further in view of Klein et al. (U.S. Publication No. 2007/0004444 hereinafter, "Klein").

Consider claim 26, Haartsen and Kegasa in combination, fails to teach a plurality of beacons received representing the same frequency, the derived transmit power spectral density limit is related to that of the beacon received at the highest power.

However, Klein teaches a plurality of beacons received representing the same frequency, the derived transmit power spectral density limit is related to that of the beacon received at the highest power (page 2, [0017]).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Klein into view of Haartsen and Kegasa, in order to provide a method for use in a wireless local area network, wherein mobile units receive beacon signals from access points and associate with access points for data communication therewith. The method is for controlling transmitter power level of a mobile unit.

Consider claim 28, Klein further teaches a predetermined maximum transmit power spectral density is set, if no beacons are received at the transmitter (page 1, [0010]).

Consider claim 29, Klein further teaches the method further comprising choosing a transmission frequency for the transmitter which permits the maximum power spectral density for the transmission (page 1, [0010]).

Consider claim 31, Haartsen further teaches a transmit power spectral density for a transmission from the transmitter is set dependent upon the strength of the received beacon at the chosen frequency (col. 6 line 63 through col. 7 line3).

Consider claim 40, Klein further teaches a bandwidth managed by a beacon is sufficiently narrow that substantial correlation of shadow fading applies across that bandwidth (page 2, [0017]).

6. Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen in view of Kegasa and further in view of Tanno et al. (U.S. PAT. 7,315,566 hereinafter, "Tanno").

Consider claim 34, Haartsen and Kegasa in combination, fails to teach a code division multiple access (CDMA) protocol is applied, whereby beacons representing different frequencies are distinguished from one another by different codes.

However, Tanno teaches a code division multiple access (CDMA) protocol is applied, whereby beacons representing different frequencies are distinguished from one another by different codes (col. 1 lines 13-24 and col. 6 lines 12-23).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Tanno into view of Haartsen and Kegasa, in order to provide a method for use in a wireless local area network, wherein mobile units receive beacon signals from access points and associate with access points for data

communication therewith. The method is for controlling transmitter power level of a mobile unit.

Consider claim 35, Tanno further teaches a correlation period of a CDMA component of the beacon signal is controlled by an FFT controller (col. 6 lines 24-35).

Allowable Subject Matter

7. Claims 27, 30, 32, 33, 41, 42 and 44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. Any response to this action should be mailed to:

Mail Stop_____ (Explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Facsimile responses should be faxed to:

(571) 273-8300

Hand-delivered responses should be brought to:

Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22313

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is (571) 272-8329. The examiner can normally be reached on 8:00Am - 5:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung Nay A. can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tuan H. Nguyen/
Examiner
Art Unit 2618